

2818

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(to be used for all correspondence after initial filing)

Application Number	10/033,323
Filing Date	12/28/2001
First Named Inventor	Rueckes, et al.
Group Art Unit	2818
Examiner Name	Not Yet Assigned
Attorney Docket Number	112020.127/NAN-4

Total Number of Pages in This Submission

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): - Postcard
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Remarks

1. Form PTO-1449 (21 pages)
2. Copies of 539 publications

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Signature	
Dat	07/03/2003

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Rueckes, Thomas et al.

Serial No.: 10/033,323

Examiner: Unassigned

Filed: December 28, 2001

Group Art Unit: 2818

For: ELECTROMECHANICAL THREE-TRACE JUNCTION DEVICES

Attorney Docket No. 112020.127 / NAN-4

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Commissioner for Patents
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INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97-98, Applicants bring to the attention of the Examiner the following publications listed on the attached Form PTO-1449.

This submission does not represent that a search has been made or that no better art exists and does not constitute "prior art". Applicants reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed publications, should one or more of the publications be applied against the claims of the present application.

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Copies of the publications listed on the attached Form PTO-1449 are submitted herewith. It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449 with the next Patent Office communication.

It is Applicants' belief that that this Information Disclosure Statement is being filed prior to the mailing of the first Office Action on the merits and is therefore submitted as both timely and proper; thus, no fees are believed to be due. However, in the event of a fee deficiency, the Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 08-0219.

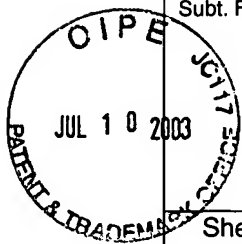
Respectfully submitted,

Dated: July 3, 2003

A handwritten signature in dark ink, appearing to read "Peter M. Dichiaro", written over a horizontal line.

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Registration No. 38,005
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Subt. For, PTO-1449				Docket Number 112020.127 NAN-4		Application Number 10/033,323	
INFORMATION DISCLOSURE IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Applicant Thomas Rueckes et al.			
				Filing Date December 28, 2001		Group Art Unit 2818	
Sheet	1	OF	21				

U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,346,683	09/13/94	Green et al.	423	447.2	
	5,424,054	06/13/95	Bethune et al.	423	447.2	
	5,456,986	10/10/95	Majetich et al.	428	403	
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	5,753,088	06/19/98	Olk	204	173	
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	5,946,930	09/07/99	Anthony	62	293	
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	6,105,381	08/22/00	Ghoshal	62	259.2	
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Subt. For, PTO-1449

Docket Number
112020.127 NAN-4Application Number
10/033,323INFORMATION DISCLOSURE
IN AN APPLICATION

(Use several sheets if necessary)

Applicant

Thomas Rueckes et al.

Filing Date

December 28, 2001

Group Art Unit

2818

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	5,196,396	03/23/93	Lieber	505	1	
	5,252,835	10/12/93	Lieber et al.	250	492.1	
	5,840,435	11/24/98	Lieber et al.	428	698	
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	5,590,078	12/31/96	Chatter	365	189.01	
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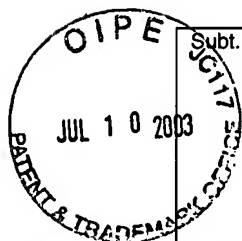
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Docket Number
112020.127 NAN-4

Application Number
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Applicant
Thomas Rueckes et al.

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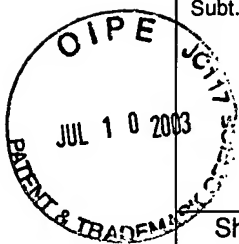
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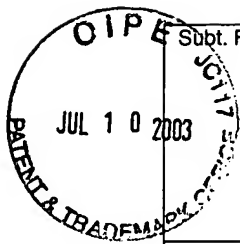
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INFORMATION DISCLOSURE IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Applicant Thomas Rueckes et al.			
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Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	0 613 130 A1	08/31/94	EP				
	0 665 187 A1	08/02/95	EP				
	0 665 187 B1	12/29/97	EP				
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Thomas Rueckes et al.Filing Date
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	1 069 206 A2	01/17/01	EP			
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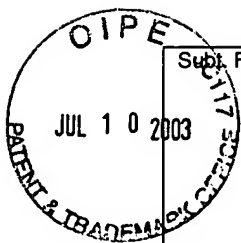
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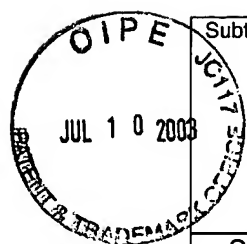
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Sheet	6	OF	21		

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A2	"Double Sided 4Mb SRAM Coupled Cap PBGA Card Assembly Guide." International Business Machines Corp. (IBM), 1998.
A3	Tyagi <i>et al.</i> "A 130nm Generation Logic Technology Featuring 70nm Transistors, Dual Vt Transistors and 6 Layers of Cu Interconnects." Portland Technology Development.
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A5	Wei, Chengyu <i>et al.</i> "Temperature and Stain-Rate Dependent Plastic Deformation of Carbon Nanotube."
A6	"Package Mechanicals for USAR ICs." USAR Systems, Inc., 1998.
A7	Dipert, Brian. "Exotic Memories, Diverse Approaches." EDN Magazine. April 26, 2001, 56-70.
A8	Duan, Xiangfeng. "Indium Phosphide Nanowires as Building Blocks for Nanoscale Electronic and Optoelectronic Devices." Nature (2001); 409: 66-69.
A9	Yang. "A High Performance 180 nm Generation Logic Technology." Portland Technology Development.
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A13	Cui, Yi. "Doping and Electrical Transport in Silicon Nanowires." The Journal of Physical Chemistry B (2000); Vol. 104, No. 22: 5213-5216.
A14	Li, Mingtao <i>et al.</i> "Direct Three-dimensional Patterning Using Nanoimprint Lithography." Applied Physics Letters (2000); Vol. 78, No. 21: 3322-3324.
A15	"8 Mb Synchronous Communication SRAM (IBM0418A86LQKA, IBM0418A86SQKA, IBM0436A86IQKA, IBM0436A86SQKA)." International Business Machines Corp. (IBM), 1999.
A16	Dipert, Brian. "Memory Cards: Designing with a Full Deck." EDN Magazine. May 25, 2000.
A17	Schönenberger, Christian <i>et al.</i> "Physics of Multiwall Carbon Nanotubes." Physics World. April 4, 2000.
A18	Whatmore, Roger W. "Nanotechnology." Ingenia. February, 2000.
A19	"Nanochip NC800SX, 0.8 Gbyte Molecular Memory IC (R/W), Nanochip NC200SX, 0.2 Gbyte Molecular Memory IC (R/W), Nanochip NCM4510SX, Molecular Array Read/write Engine, Low Voltage Thermal Actuated, Dynamic Media Series M2, Nanochip NC4525DX, A/D-D/A Interface, Preliminary Specifications, Advance Information, 1996-2000 Nanochip Document NCM2230500."
A20	Odom, Teri Wang <i>et al.</i> "Atomic Structure and Electronic Properties of Single-Walled Carbon Nanotubes." Nature (1998); 391: 62-64.
A21	Ouyang, Min. "Atomically Resolved Single-Walled Carbon Nanotube Intramolecular Junctions." Science (2001); 291: 97-100.
A22	Odom, Teri Wang <i>et al.</i> "Magnetic Clusters on Single-Walled Carbon Nanotubes: The Kondo Effect in a One-Dimensional Host." Science (2000); 290: 1549-1552.
A23	Wong, Eric <i>et al.</i> "Nanobeam Mechanics: Elasticity, Strength, and Toughness of Nanorods and Nanotubes." Science (1997); 277: 1971-1975.
A24	Hu, Jiangtao <i>et al.</i> "Controlled Growth and Electrical Properties of Heterojunctions of Carbon Nanotubes and Silicon Nanowires." Nature (1999); 399: 48-51.
A25	Rueckes, Thomas <i>et al.</i> "Carbon Nanotube-Based Nonvolatile Random Access Memory for Molecular Computing." Science (2000); 289: 94-7.
A26	Kim, Philip <i>et al.</i> "Nanotube Nanotweezers." Science (1999); 286: 2148-2150.
A27	Huang, Yu <i>et al.</i> "Directed Assembly of One-Dimensional Nanostructures into Functional Networks." Science (2001); 291: 630-33.
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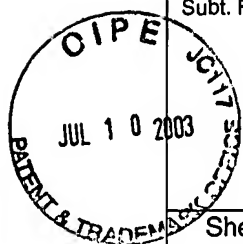
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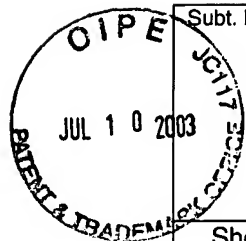
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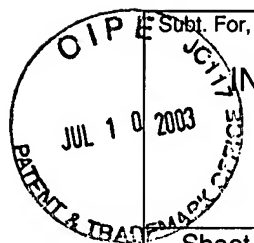
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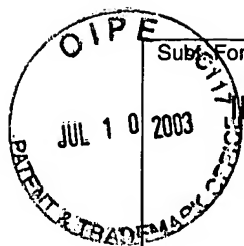
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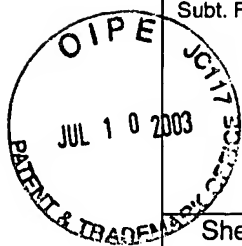
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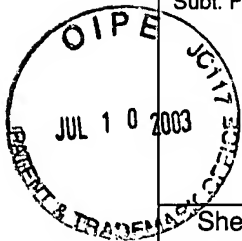
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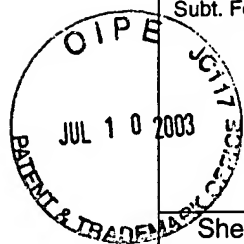
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INFORMATION DISCLOSURE IN AN APPLICATION (Use several sheets if necessary)				Applicant Thomas Rueckes et al.	
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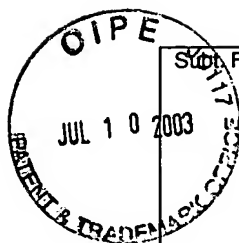
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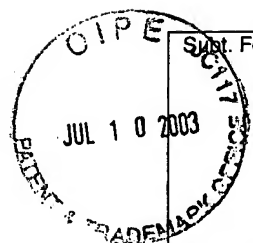
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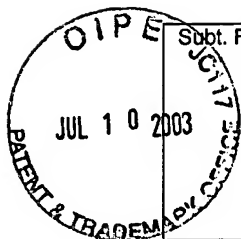
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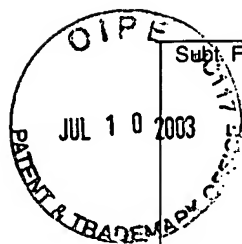
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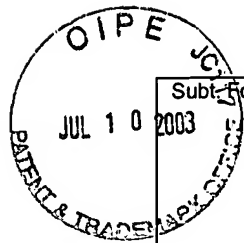


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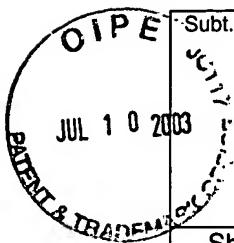
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Subt. For, PTO-1449				Docket Number 112020.127 NAN-4	Application Number 10/033,323
INFORMATION DISCLOSURE IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Applicant Thomas Rueckes et al.	
				Filing Date December 28, 2001	Group Art Unit 2818
Sheet	20	OF	21		

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